



PATENT

IN THE UNITED STATES PATENT AND TRADEMARK OFFICE

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Reply  
Brief  
# 12

Application of: **MICHAEL T. DOBBERTIN,  
HENRY P. MITCHELL Jr.**

Docket No.: 2000009

Serial No.: 09/688,001

Art Unit: 3651

Filed: October 14, 2000

Examiner: H. Grant Skaggs

For: **PULSED AIRKNIFE CONTROL FOR A VACUUM CORRUGATED FEED  
SUPPLY**

Assistant Commissioner of Patents & Trademarks  
Washington, D.C. 20231

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Kathleen K. Bowen

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**REPLY BRIEF FOR APPELLANT**

Sir:

This response is filed to reply to Examiner's Answer mailed on December 5,  
2002.

**A) THE UNOBVIOUSNESS OF CLAIM 5 OVER YOSHIDA ET AL IN VIEW OF  
JANTSCH ET AL.**

Claim 5 stands rejected under 35 U.S.C. §103 over Yoshida et al in view of  
Jantsch et al. Following is a recitation of Claim 5:

5. A method of operating a vacuum corrugated belt feeder with positive air pressure separator during  
a feed cycle wherein said vacuum and said positive pressure air are controlled by a vacuum valve and a  
positive air pressure valve respectively, wherein the paper is taken away by a belt which is activated when

a feed clutch is energized, comprising:

opening said vacuum valve and said positive pressure air valve;  
closing said positive pressure air valve;  
energizing the feed clutch on the belt feeder;  
5 de-energizing the feed clutch ; and,  
closing said vacuum valve.

"The Examiner bears the initial burden of factually supporting any *prima facie* conclusion of obviousness" [MPEP 2142]. To establish a *prima facie* case of obviousness, "the prior art reference (or references when combined) must teach or  
10 suggest all claim limitations" [MPEP 2142].

The Examiner points out a timing chart Figure 34 which shows a vacuum valve 13 switching from position c to position d, and a drive of a conveyor belt 14 switching on and off. This chart also shows a positive air pressure valve 22 switching from position a to position b, all the while allowing a positive airflow Q2 and Q1 respectively. Claim 5  
15 above clearly states "closing said positive pressure air valve" and then "energizing the feed clutch" This is in contradiction to Figure 34 of Yoshida et al where the positive airflow is highest (Q1) when the belt is energized. However, the Examiner takes the position that there is another embodiment in Yoshida et al, Figures 25-28 which show a positive air pressure valve 22 switching from an open position a to a closed position b.

20 The Examiner then argues that because the chart Figure 34 suggests "a timing between the operation of the valve 13 and the movement of conveyor belt 14 regardless of the air flowing through the nozzle 19...one of ordinary skill in the art could easily recognize that the timing between the closing of the valve " (the Examiner does not state to which of the two valves he is referring to) " and the stopping of the conveyor  
25 could easily be applied to the embodiment of Figure 2" (applicant assumes the Examiner is referring to Figures 25-28) "and would require mere common sense." Applicant contends that the Examiner has not shown "closing said positive pressure air valve" and then "energizing the feed clutch"; and therefore has not shown that "the prior art reference (or references when combined)" teaches or suggests all claim limitations  
30 and thus the Examiner has not established a *prima facie* case of obviousness [MPEP 2142].

The Examiner further states "that merely having the vacuum of Yoshida et al run until after the feed belt 14 of Fig. 25 is de-energized would require mere choice or

expedience since [it] would appear that the apparatus runs equally well with the vacuum turned off after the de-energizing of the belt 14.” The Examiner goes on to say that “appellant has failed to show why the change in the timing of the closing of the valve 13 until after the de-energizing of the belt 14 would produce any desired or unexpected result.” However, to establish a *prima facie* case of obviousness, “first there must be some suggestion or motivation...to modify the reference” [MPEP 2142]. “The Examiner bears the initial burden of **factually supporting** any *prima facie* conclusion of obviousness. If the Examiner does not produce a *prima facie* case, the applicant is under no obligation to submit evidence of nonobviousness.” To say that it appears to the Examiner that Yoshida et al would run equally well as modified in hindsight with applicants invention falls well short of the Examiner’s burden of “factually supporting” a *prima facie* case of obviousness. Applicants contend that the Examiner has not met his burden of proof, and that rejection of Claim 5 on this reasoning is in error. Likewise, the rejections of claim 1-4 are all based on this same reasoning, and therefore rejections of claims 1-4 on this basis is also in error.

Appellant requests reversal of the Examiner regarding rejection of claim 5, and claims 1-4.

**B) THE UNOBVIOUSNESS OF CLAIMS 1-4 OVER YOSHIDA ET AL IN VIEW OF JANTSCH ET AL AS APPLIED TO CLAIM 5, AND FURTHER IN VIEW OF WATKISS.**

Claims 1-4 stand rejected under 35 U.S.C. §103 over Yoshida et al in view of Jantsch et al as applied to claim 5 above, and further in view of Watkiss. The Examiner’s position prior to the Examiner’s answer is summarized below.

It would be obvious in order to aid in separation of the sheets from the stack to have the positive air pressure from valve 22 of Yoshida et al delivered in pulses as made obvious by Watkiss. Note air blasts from nozzles 72 and column 5 lines 6-30 of Watkiss.

In the Examiner's answer, the Examiner stated it is the "examiner's position that Watkiss is applied merely to teach that it is known that pressurized air used in the separation of sheets can be provided as pulsing air and **nothing more**" (emphasis added). This position is inconsistent with MPEP 2141.02 which states that "A prior art reference must be considered in its entirety, i.e. as a whole, including portions that would lead away from the claimed invention."

In Applicants brief, appellants have shown that not only is there no motivation to combine Watkiss and Yoshida et al, but Watkiss is not compatible with Yoshida et al. The Examiner must show that "the teaching or suggestion to make the claimed combination and the reasonable expectation of success must both be found in the prior art, and not based on applicant's disclosure" [MPEP 2142]. The Examiner has made no such showing, and therefore has not met his burden of proof for a *prima facie* case of obviousness. Applicants respectfully submit that as such the rejection of claims 1-4 on this basis are in error, and request reversal of the Examiner regarding rejection of claims 1-4.

With regard to claim 2, the Examiner states that "Yoshida et al clearly teaches in column 18 lines 36-44 that the pressurized air is stopped (de-activated) *just before or at the same time* as the conveyor belt 14 is operated." With regard to claims 3 and 4, the Examiner changes his position with regards to the same passage in Yoshida et al and states, "in Yoshida et al, the valve 22 is closed (de-activating positive air flow) *at about the same time* the conveyor belt is activated (see column 18 lines 36-44)." However, column 18 lines 36-44 of Yoshida et al actually states "Thereafter, the valve 22 is switched to the position b to stop the injection of air ...*At the same time*, the convey belt 14 is driven by the motor." Examiner then states that "50 milliseconds is a very short time" and it is the applicant's burden to show that a time between the air pressure valve closing and the clutch energizing has produced unexpected results. However, applicants contend that the Examiner has not met his burden of proof in showing "some suggestion or motivation ... to modify the reference" [MPEP 2142] and the Examiner has not shown that the prior art reference teaches or suggests all the claim limitations. The Examiner therefore has not met his burden of proof for a *prima facie* case of obviousness. Applicants respectfully submit that as such the rejection of claims 2-4 on

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this basis are in error, and request reversal of the Examiner regarding rejection of claims 2-4.

5 C. SUMMARY

Appellant's claimed pulsed airknife control for a vacuum corrugated feed supply (claims 1-5) is distinct and patentably defined over the cited references as applied by the Examiner. Appellant requests reversal of the final rejection in its entirety.

10 Respectfully submitted,

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20 Date: 2/5/03